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ABSTRACT

This paper explores systems of classification to develop a conceptual model adequate as an organized knowledge base for organizational communication research findings. The paper notes that present classification systems employed in organizational communication textbooks and in reviews of organizational literature are not adequate to the task of furnishing a comprehensive and organized knowledge base. It then proposes a determinant-outcome classification system in response to this need. The proposed system consists of four outcome variables, six determinant variables, and four types of communication interface and treats communication as a determinant variable that influences outcome variables and other determinant variables. The paper contends that, as a determinant variable, communication may be independent or dependent in accordance with the circumstances. In addition, the paper notes that the further development and application of this conceptual model could result in an "inventory of propositions," each proposition relating to a class formed by an independent variable influencing a dependent variable in a specific type of communication interface. (Author/FL)

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ORGANIZATIONAL COMMUNICATION RESEARCH: - A CONCEPTUAL MODEL FOR AN ORGANIZED KNOWLEDGE BASE

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FOREWORD

"Probably because the human mind must categorize
in order to make sense of the world,
typologies abound.

But, because the world defies any set of categories,
all typologies are imperfect.

The most ingenious taxonomic schemes,
when exposed to the test,
are found either to include or to exclude too much.

The following set of categories
is therefore proposed
in the full knowledge
that any given investigation
may easily be subsumable under more than a single category."

W. Charles Redding,
"Research Setting: Field Studies"
in Emmert, Philip, and Brooks, William
Methods of Research in Communication
Boston (Houghton Mifflin Company, 1970) p.140

ABSTRACT

This paper explores systems of classification to develop a conceptual model adequate to serve as an organized knowledge base for organizational communication research findings.

A review of the development of social and biological sciences indicates that sound classification systems are required for the organization and synthesis of accumulated knowledge in all fields of study. Thusfar, the field of organizational communication has no sound conceptual model to consolidate research findings in a meaningful way.

Present classification systems employed in the textbooks of organizational communication and in reviews of organizational communication literature are not considered adequate to the task of furnishing a comprehensive and organized knowledge base. In response to this need, a Determinant-Outcome Classification System is proposed, discussed, and illustrated.

The classification system consists of four outcome variables, six determinant variables, and four types of communication interface. Communication is treated as a determinant variable influencing outcome variables and other determinant variables. As a determinant variable, Communication may be independent or dependent, in accordance with the circumstances. There is a detailed suggestion for the numerical coding of classes.

It is noted that the further development and application of this conceptual model could result in an inventory of propositions, each proposition relating to a class formed by an independent variable influencing a dependent variable in a specific type of communication interface. It would be possible to conduct an extensive analysis of each outcome variable as well as each determinant variable influencing a given outcome variable.

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ORGANIZATIONAL COMMUNICATION RESEARCH:-
A CONCEPTUAL MODEL FOR AN ORGANIZED KNOWLEDGE BASE

The Need For An Organized Knowledge Base

Stead(1978) has recently pointed out the need for professional organizations to foster more rigorous scientific research to build a sound body of knowledge on which to base business communication principles. Giesselman(1977) has indicated that, on the one hand, communication research has a jungle of unrelated concepts, and on the other hand, a mass of undigested, often sterile, empirical data; that researchers need shared paradigms to help channel and coordinate efforts; and that analyzing, classifying, and reclassifying may be a procedural direction to achieve some order, some understanding of the state of the art so as to know better how to channel our research activity. This comment by Giesselman, in respect to organizational communication is somewhat similar to the reasoning given by McGrath and Altman(1966) relative to the field of small-group research, --viz., that we already had accumulated an enormous pool of facts about small group behavior and that the time had come to organize this knowledge so that we could see what we did know and what we did not know about small groups. Their book summarized a classification system for organizing and synthesizing small-group research information, applied that classification system to small-group studies, and presented insights and impressions gained about small-group research.

Downs(1969) was supportive of this analogy between small-group research and organizational communication research, when he stated that "organizational communication today is in a position comparable to that of group dynamics several years ago, with many short research studies, limited in scope, and no one to synthesize the results." Since 1969, the most noteworthy development for the synthesis of organizational communication knowledge has been the production of organizational communication textbooks.

Apparently, this kind of dissatisfaction with the state of organization of the knowledge base has occurred in many, if not all of the social sciences, physical sciences, and biological sciences. In 1967, Guetzkow commented on the state of affairs in the field of sociology, when he wrote a piece titled "Now is the Time to Consolidate" ---i.e., to consolidate our knowledge about organizations, and he included the following statements:

> -there is a feeling that our efforts in the study of organizations are redundant and inefficient.
>
> -scholars accidentally repeat studies which already have been done, because of their carelessness in searching the literature.
>
> -we're now ready for conceptual inventories. . .which consolidate our knowledge.
>
> -consolidation will permit scholars to build more cumulatively, so that their researches are less fragmented and ephemeral.

Cullinan(1964) notes the following limitations of educational administration as a body of knowledge: (1) a heterogeneity of facts; (2) lack of common definitions and agreement upon classification; (3) lack of a consistent set of principles; and (4) both lack of interest in theory and understanding of theory's

purpose on one hand, and anxiety and impatience to build a comprehensive and full-blown theory on the other. He notes the nature of the growth and refinement of every organized body of knowledge as proceeding from a none-too-ordered description to a system of classifications and generalizations useful in predicting future events, and taking the form of analytical models of the behavior of the elements being studied. Classification is considered as a tool for theory building by organizing and integrating what is known about the area in which the theorizing activity is being conducted; and by demonstrating the voids in a body of knowledge and indicating research needed to fill the gaps.

Laufer(1968) points out the need for an organized framework to hold the elements in a theory of management, calling for a taxonomy of management that would ameliorate the semantic difficulties and foster a systematic grouping of interrelated principles. Laufer's taxonomy, similar to that found in the biological sciences, provides for (1) classification, (2) nomenclature, and (3) identification.

Blackwelder(1967), in his definitive work on the subject of taxonomy, quotes many scientists as to the value of taxonomy as a foundation for biological science. For example, he quotes G.G.Simpson, a paleontologist, evolutionist, and systematist, as stating "it is impossible to speak of the objects of any study, or to think lucidly about them, unless they are named; and it is impossible to examine their relationships, to treat them scientifically, without putting them into some sort of formal arrangement."

This need for an organized knowledge base, so evident in other disciplines, is also true of organizational communication, and probably more so. We are in no position to point to an authoritative work in organizational communication that contains a taxonomy (i.e., an arrangement of phenomena into classes which are hierarchically ordered), but we believe we can take a step in that direction by studying classification (i.e., group-making based on relationships), nomenclature (i.e., the assignment of a distinguishing name to each group or class), and identification (i.e., the process through which the individual unit is placed in a group as a result of the recognition that it is similar to others in that group).

Classification System Aspirations

It is our hope that organizational communication research will increasingly contribute to the understanding of the larger field of organizational behavior. We believe this can be facilitated by developing classification systems that permit the organized storage and retrieval of the findings of research. The organization of such a knowledge base should provide for relating communication factors to major elements in the organizational communication system, to determinants of end-result variables, and to end-result variables. These goals for a classification system approach to theory development are yet to be achieved. Such a classification system was not available for our overviews of the 1976 and 1977 organizational communication literature.

Falcione and Greenbaum(1977) and Greenbaum and Falcione(1978) employed four classification systems in their review of the organizational communication literature for the years 1976 and 1977 -- viz., (1) Major Literature Groups, (2) Subclasses of Major Literature Groups, (3) Publication Format, and (4) Research Characteristics of the Writing.

The classification system for major literature groups involved nine categories:

-Interpersonal Communication
-Intragroup Communication
-Intergroup Communication
-Communication Factors and Organization Goals
-Skill Improvement and Training
-Communication Media: Software and Hardware
-Communication System Analysis
-Research Methodology
-Texts, Anthologies, Reviews, Bibliographies

In general, there is a fourfold basis for this classification system: (1) the numbers of persons involved in the communication process (e.g., interpersonal, group), (2) the location of the interacting parties (e.g., intra-group, inter-group), (3) aspects of communication technology (e.g., skill improvement, media), and communication appraisal and evaluation (e.g., system analysis).

The second type of classification system involves subclasses of the major literature groups. There are 69 subclasses for the nine major literature groups, ranging from six to ten subclasses per major group. Noteworthy is the fact that the subclasses for Interpersonal, Intragroup, and Communication Factors/Organization Goals attempt to apply causation-correlational concepts. For these three major classes, it was found to be feasible to classify writings so that each of the subclasses could be considered as a dependent variable. In respect to the other six major literature

groups, the subclasses were derived by effecting a logical division of the subject matter of the major class, with no attempt to apply the logic of independent and dependent variables. For a detailed listing of the subclasses, see Greenbaum and Falcione(1978).

The third type of classification system employed in the overviews for 1976 and 1977 related to publication format. Two standard classifications were selected to segregate the larger works of books and dissertations from the briefer writings found in articles, papers, and U.S. government reports.

The fourth type of classification system guiding the 1976 and 1977 literature analysis relates to the research characteristics of each study. Writings were coded as to whether a field study(FS), laboratory study(LS), theoretical-conceptual study(TC), or a prescriptive-descriptive study(PD). Definitions for each of these concepts served as guidelines to identify research or writing methods.

While the above four systems of classification were necdssary for the the formulation of an overview of literature, and furnished organization to the presentation of such an overview, the same systems in any combination are not up to the task of presenting a comprehensive conceptual model linking determinants and end-result variables, and thereby to serve as a knowledge base for the findings of organizational research. The balance of this paper is devoted to the presentation of a classification system that is more attuned to this objective. This exploratory effort has been influenced greatly by the work of Price(1968), Sanford, Hunt, Bracey(1976), and Greenbaum and Falcione(1978).

The Determinant - Outcome Classification System

How might we achieve a classification system that will efficiently store the ever-increasing findings of organizational communication research, allowing for reasonably easy reference and retrieval of that information? Can we put together a classification system that will represent a conceptual inventory of our knowledge, furnishing a consolidation that will permit scholars to build more cumulatively? Our answer is that we would like to try, hoping that others will find the challenge most interesting, adding their resources to gain team power.

The exploratory classification system described below is titled "The Determinant-Outcome Classification System" for the reason that it emphasizes causal factors and end-result variables indicative of organizational effectiveness. It is intended to provide a means for organizing the basic findings of organizational communication research, constituting a conceptual inventory capable of absorbing change both in content and classifications. The basic concepts of this system follow:

1-Organizational Effectiveness Factors:

Organizational effectiveness can be studied in terms of determinant variables and outcome variables. The outcome variables,ac a total, represent the concept of organizational effectiveness. Determinant variables interact with each other and with outcome variables. Outcome variables interact with each other and determinant variables.

2-Outcome Variables and Determinant Variables:

There is no general agreement on the components of either outcome variables or determinant variables. In this paper the concept of OUTCOME VARIABLES includes the following:

-Morale
-Institutionalization
-Performance-Effectiveness
-Adaptiveness-Innovation

These four outcome variables represent a modification of the intervening variables selected by Price(1968) in his review of 50 case studies of organizational effectiveness. Price identified five outcomes as intervening variables, Morale, Institutionalization, Adaptiveness, Productivity, and Conformity. However, experience indicates that the concept of PRODUCTIVITY is difficult to operationalize being generally associated with the outcome of PERFORMANCE. Therefore, our treatment of outcome variables employs the term PERFORMANCE-EFFECTIVENESS to include the concepts of productivity and conformity to plans.

The determinant variables selected for this classification system follow:

-Leadership
-Communication
-Motivation
-Organization Structure
-Technology and Job Design
-External Environmental Factors

Each of the determinant variables can be further subdivided in terms of subject content. For example, the determinant of EXTERNAL ENVIRONMENTAL FACTORS can be divided as to (1) general culture, (2) economic factors, (3) technical factors, (4) sociological factors, and (5) legal-political factors.

3- Place of Organizational Communication in the Determinant - Outcome Classification System.

As a determinant variable, organizational communication is subdivided into four subclasses: (1) communication structure, (2) communication climate, (3) communication skills, and (4) communication controls. The subclasses closely resemble the analysis found in Sanford, Hunt, and Bracey(1976) except that the category of communication controls has been added.

As a descriptor variable, organizational communication can describe the nature of the interaction of persons working within the organization. The interaction may involve two or more persons, within or outside the group or organization; and it may be verbal or non-verbal; and if verbal, may be written-verbal or oral-verbal. These differences can be considered under the heading of channel or mode of communication. In this paper we use the expression "type of communication" to cover these elements. The four types of interfacing considered in the determinant-outcome classification system are noted below:

-interpersonal communication
-intra-group communication
-inter-group communication
-organization-wide or system-wide communication

Organizational communication is not considered one of the outcome variables. It is a determinant variable which influences the outcome variables and is influenced by other determinant and outcome variables. Therefore, organizational communication is both a dependent and independent variable in relation to other determinant variables and the outcome variables.

4- Presentation Problems and Decisions:

As indicated above, the Determinant-Outcome Classification System has four outcome variables, six determinant variables, and four types of interface communication, with provision for subdividing variables and changing variables. Ideally, the dynamics of organizational communication should be viewed in the contents of one comprehensive table, whereby it is possible to see how a change in one variable influences all other variables, both directly and indirectly. Realistically, however, we are not presently able to accomplish this counterpart of the input-output table in the field of economics, but it should be considered as an objective for the future. At this time, it is advisable to present the classification format in the most elementary terms possible. This can be done by treating each outcome variable separately, and each determinant variable separately, and in the treatment of each to note the factors influencing that variable and the types of communication interface involved. This is illustrated in Table 1 and 2 for two outcome variables, and by Tables 3 and 4 for two determinant variables.

Table 1 notes the determinants of the outcome variable of MORALE(DV) in research studies related to organizational communication. The table contains the four outcome variables, six determinant variables and the four types of communication interface. An "author name" is noted at the juncture of the determinant variable COMMUNICATION STRUCTURE and the communication type INTRAGROUP. This is intended to mean that the particular author conducted a study involving small-groups,

in which COMMUNICATION STRUCTURE(IV) was the independent variable and MORALE(DV) was the dependent variable. The writing might have been a study of the influence of group participation on job satisfaction.

Table 2 notes the determinants of the outcome variable PERFORMANCE(DV) in research studies related to organizational communication. The table contains the four outcome variables, the six determinant variables and four communication interface types. An "author name" is noted at the juncture of the outcome variable MORALE and the communication type INTERPERSONAL. This is intended to mean that the particular author conducted a study in interpersonal communication, in which MORALE(IV) was considered the independent variable, and PERFORMANCE(DV) was the dependent variable. The writing might have been a study of the influence of job satisfaction on productivity.

Table 3 notes the determinants of the variable MOTIVATION(DV) in research studies related to organizational communication. The table contains the four outcome variables, the six determinant variables and four communication interface types. An "author name" is noted at the juncture of the determinant variable TECHNCLOGY and the type of communication interface INTRAGROUP. This is intended to mean that the particular author conducted a study in group communication, in which TECHNOLOGY AND JOB DESIGN(IV) was considered as the independent variable, and MOTIVATION(DV) was the dependent variable. The writing might have been a study of the influence of job design on motivation.

Table 4 notes the determinants of the variable COMMUNICATION CLIMATE(DV) in research studies related to organizational communication. The table contains the four outcome variables, the six determinant variables, and four communication interface types. An "author name" is noted at the junction of the outcome variable ADAPTIVENESS-INNOVATION and the communication type ORGANIZATION-WIDE. This is intended to mean that the particular author conducted a study relating to the organization as a whole, in which ADAPTIVENESS(IV) was considered the independent variable, and COMMUNICATION CLIMATE(DV) the dependent variable. The writing might have been a study of the influence of decision-making processes on communication climate.

5- Numerical Coding for Classes in the Determinant-Outcome Classification System.

An important aspect of a conceptual inventory of communication research findings is the provision of a systematic method for classifying communication variables. The establishment of a numerical coding system can furnish a higher level of clarity in a discussion of the knowledge within a particular class representing a causal variable in relationship to a dependent variable, the identification of knowledges relevant to a particular dependent variable, and the influence of a given determinant variable on each of the outcome variables. The numerical coding for groups in the Determinant-Outcome Classification System is presented in Table 5.

Based on the numerical coding in Table 5, one possible numerical notation system could link the numerical codes for the dependent variable(DV), the independent variable(IV), and the communication type(CT). This can be expressed as DV-IV-CT; and the number 110-220-40 would refer to the class involving MORALE as the dependent variable, COMMUNICATION as the independent variable, and ORGANIZATION-WIDE as the communication interaction mode. Table 6 indicates the numerical classes or the class numbers that would result from the application of this system. All of the numbers relate to the outcome variable MORALE(DV) so that each number starts with the code for MORALE, which is "110".

In this way each of the categories in the Determinant-Outcome Classification System can have an assigned number, and findings can be assigned to that numbered category, discussion can center about that numbered category, and information can be retrieved from that numbered category. While the numerics may appear unnecessary at the level of complexity presented in this paper, the application of this classification system to all of the literature in a given period of time would find the numbering system to be an important organizing influence, and a convenient"shorthand" for a particular category involving a dependent variable, independent variable, and communication type.

Summary and Conclusion

This paper has sought to find a classification system representing a conceptual model adequate to serve as a knowledge base for research findings in organizational communication.

The classification system utilized for the 1976-1977 overview of the literature was indicated to be related primarily to types of communication and communication skills, and not adequate to serve as a conceptual model, or as a dynamic knowledge base for research findings. A brief and exploratory report was then given as to the Determinant-Outcome Classification System as a possible basis for the attainment of a satisfactory conceptual model.

The Determinant-Outcome Classification System has the basic purpose of relating factors studied in organizational communication research to the end-result variables indicative of organizational effectiveness. Four outcome variables were suggested to represent organizational effectiveness, six determinant variables to represent action variables, and four communication-types to represent the interfaces in which the determinants influence outcomes.

It was noted that both the determinant variables and the outcome variables can be independent variables; and that both outcome and determinant variables can be dependent variables. Therefore, in considering outcome variables, it is necessary to distinguish between dependent outcome variables and independent outcome variables; and

in considering determinant variables, it is necessary to distinguish between independent determinant variables and dependent determinant variables.

In this structure, communication is noted as a determinant variable that may be an independent or dependent variable in given situations. Communication, as a determinant variable has the four facets of structure, climate, skills and controls. In addition, there is provision for noting the type of communication interface, whether interpersonal, intragroup, intergroup, or organization-wide.

Illustrative tables were shown of two outcome variables, and two determinant variables, indicating the procedure for classifying the findings of a research study under the present principles of the Determinant-Outcome Classification System. A complete presentation would have required a table for each outcome variable and each determinant variable, and where any variable is subdivided, a supporting table for each subdivision. Thus, in the instance of communication, in a more complete presentation, a determinant-outcome table would be necessary for each of the four facets suggested -- viz., structure, climate, skills, and controls.

The presentation also included a plan for numerically identifying each category in the proposed classification system.

There are many problems to consider before the above conceptual model can be successfully applied. However, if the theoretical model is thought capable of integrating the findings of organizational communication research in a meaningful manner, the practical problems of obtaining the required data should be faced.

Under this kind of classification system, a detailed overview could present an inventory of propositions relative to each class formed by a given independent variable influencing a dependent variable in a particular type of communication interface. This would involve an extensive treatment of each of the outcome variables and each of the determinant variables, permitting analysis of the factors affecting these variables. This type of information would be derivable from completed tables similar to those illustrated herein, supported by the detail in well-prepared abstracts with full bibliographical references.

This approach to providing a knowledge base for organizational communication may appear to transcend the province of organizational communication. Our opinion is that one cannot discuss organizational communication in isolation from other organizational behavior variables. Communication is affected by and affects the other variables. This appears to mean that a greater understanding of organization communication is contingent upon a fuller knowledge of determinant and outcome variables in the broader field of organizational behavior.

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TABLE 1

DETERMINANTS OF THE OUTCOME VARIABLE OF MORALE (DV)

IN RESEARCH STUDIES RELATED TO ORGANIZATIONAL COMMUNICATION

	Type of Communication			
Independent Variables	Inter-personal	Intra-group	Inter-group	Organization-Wide
Morale				
Institutionalization				
Performance-Effectiveness				
Adaptiveness-Innovation				
Leadership				
Communication: -Structure		(Author name)		
-Climate				
-Skills				
-Controls				
Motivation				
Organization Structure				
Technology and Job Design				
External Environmental				

TABLE 2

DETERMINANTS OF THE OUTCOME VARIABLE OF PERFORMANCE(DV)

IN RESEARCH STUDIES RELATED TO ORGANIZATIONAL COMMUNICATION

	Type of Communication			
Independent Variables	Inter-personal	Intra-group	Inter-group	Organization-wide
Morale	(Author name)			
Institutionalization				
Performance-Effectiveness				
Adaptiveness-Innovation				
Leadership				
Communication:-Structure				
-Climate				
-Skills				
-Controls				
Motivation				
Organization Structure				
Technology and Job Design				
External Environmental				

TABLE 3

DETERMINANTS OF THE MOTIVATION VARIABLE (DV)

IN RESEARCH STUDIES RELATED TO ORGANIZATIONAL COMMUNICATION

	Type of Communication			
Independent Variables	Inter-personal	Intra-group	Inter-group	Organization-wide
Morale				
Institutionalization				
Performance-Effectiveness				
Adaptiveness-Innovation				
Leadership				
Communication: -Structure				
-Climate				
-Skills				
-Controls				
Motivation				
Organizational Structure				
Technology and Job Design		(Author name)		
External Environmental				

TABLE 4

DETERMINANTS OF THE COMMUNICATION CLIMATE VARIABLE(DV)
IN RESEARCH STUDIES RELATED TO ORGANIZATIONAL COMMUNICATION

	Type of Communication			
Independent Variables	Inter-personal	Intra-group	Inter-group	Organization-wide
Morale				
Institutionalization				
Performance-Effectiveness				
Adaptiveness-Innovation				(Author name)
Leadership				
Communication:-Structure				
-Climate				
-Skills				
-Controls				
Motivation				
Organizational Structure				
Technology and Job Design				
External Environmental				

TABLE 5

NUMERICAL CODING FOR GROUPS

IN THE DETERMINANT-OUTCOME CLASSIFICATION SYSTEM

Major Class	Codes for Major Class	Subdivision	Numerical Coding
Type of Communication	1 - 99	Interpersonal	10
		Intra-group	20
		Inter-group	30
		Organization-wide	40
Outcome Variables	100 -199	Morale	110
		Institutionalization	120
		Performance	130
		Adaptiveness-Innovation	140
Internal Organization Variables	200 - 299	Leadership	210
		Communication	220
		-Structure	221
		-Climate	222
		-Skills	223
		-Controls	224
		Motivation	230
		Organization Structure	240
		Technology and Job Design	250
External Environmental Variables	300 - 399	Economic	310
		Legal-Political	320
		Sociological	330
		Technical	340

TABLE 6

NUMERICAL CODING FOR DETERMINANTS

OF THE OUTCOME VARIABLE MORALE (Code 110)[1]

Codes	Independent Variables	Type of Communication: Interpersonal (10)	Intragroup (20)	Intergroup (30)	Organization wide (40)
110	Morale	110-110-10	110-110-20	110-110-30	110-110-40
120	Institutionalization	110-120-10	110-120-20	110-120-30	110-120-40
130	Performance-Effectiveness	110-130-10	110-130-20	110-130-30	110-130-40
140	Adaptiveness-Innovation	110-140-10	110-140-20	110-140-30	110-140-40
210	Leadership	110-210-10	110-210-20	110-210-30	110-210-40
220	Communication	110-220-10	110-220-20	110-220-30	110-220-40
230	Motivation	110-230-10	110-230-20	110-230-30	110-230-40
240	Organization Structure	110-240-10	110-240-20	110-240-30	110-240-40
250	Technology and Job Design	110-250-10	110-250-20	110-250-30	110-250-40
300	External Environmental	110-300-10	110-300-20	110-300-30	110-300-40

TABLE 6
(Continued)

Note 1: Coding based on sequence of dependent variable(DV), independent variable(IV) and communication type(CT). The three sections of the numerical designation can be expressed as DV-IV-CT -- e.g., 110-210-10 is the numerical coding for the class in which MORALE is the dependent variable, LEADERSHIP is the independent variable, and the communication type is INTERPERSONAL. Studies of superior-subordinate relationships would be found in this class.